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WESTMAN CHAMPLIN (MICROSOFT CORPORATION)
SUITE 1400
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 55402-3319

EXAMINER	
LEE, JINHEE J	

ART UNIT	PAPER NUMBER
2174	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,444	BERAN ET AL.	
	Examiner	Art Unit	
	Jinhee J. Lee	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (5627979).

Re claim 1, Chang et al. discloses a method of constructing a representation of an object having at least one property, the method comprising:

identifying at least one property group associated with the object which has been chosen to represent the object (employee 1910 group, see figure 19 for example), at least one property of the object belonging to each property group associated with the object (Salary Employee 1920 and regular employee 1930, see figure 19 for example) ;

identifying any other object that the object references within a property of an identified property group (mapping person class into employee table, see figure 16 for example);

retrieving data corresponding to each of the properties belonging to the at least one property group (user clicks on the Select Tables item 1120 which displays a listbox to select the Employee table, see column 13 lines 26-28 for example);

storing the retrieved data on a tangible computer storage medium (see column 7 lines 7-9, column 9 lines 2-4 and figure 1 for example); and

representing the object using the retrieved data (representation for accessing objects from a data store, see column 6 line 15 for example).

Re claim 2, Chang et al. discloses a method, wherein the step of representing the object further comprises visually representing the object by displaying the retrieved data (using Smart Schema, see column 5 lines 35-38 and column 7 lines 17-20 for example).

Re claim 3, Chang et al. discloses a method, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties (see figures 16 and 19 for example).

Re claim 4, Chang et al. discloses a method, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties (see figures 16 and 19 for example).

Re claim 5, Chang et al. discloses a method, wherein representing the object using the retrieved data further comprises representing the object using its own property

groups and the ones of its parent (see figure 25 and column 16 lines 18-25 for example).

Re claim 6, Chang et al. discloses a method, wherein at least one object inheritance hierarchy exist between the object and the other identified objects, and wherein each property group is unique to a particular object inheritance hierarchy (see column 16 lines 18-25 for example).

Re claim 7, Chang et al. discloses a method, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object (see figures 19 and 24 for example).

Re claim 8, Chang et al. discloses a method, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object (see figure 24 for example).

Re claim 9, Chang et al. discloses a method, wherein for at least one property group, the step of retrieving data corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group (see figures 19, 24 and 25 for example).

Re claim 10, Chang et al. discloses a method, wherein identifying the at least one property group associated with the object further comprises identifying a default property group associated with the object (see column 16 lines 2-6 for example).

Re claim 11, Chang et al. discloses a method of constructing representations of objects each having at least one property, the method comprising: associating property

groups with objects in a data base, each property group associated with an object including at least one property of the object; storing the property groups in the database; and for each of a plurality of objects in the database, specifying which property groups are to be used in representing the object (see figure 19 and abstract for example); and for each of the plurality of objects in the database, storing on a tangible computer storage medium the specification of a property groups for use in generating a user interface representing the object (see column 7 lines 7-9 and column 9 lines 2-4 for example).

Re claim 12, Chang et al. discloses a method, wherein object inheritance hierarchies exist between some of the plurality of objects in the database, wherein the step of associating property groups with objects further comprises associating property groups with objects such that each property group is unique to a particular object inheritance hierarchy (see column 16 lines 20-30 for example).

Re claim 13, Chang et al. discloses a method, wherein the step of associating property groups with objects in the data base further comprises associating property groups with objects in the database such that at least one of the property groups is associated with two objects such that properties of the two objects belong to the property group (see figure 19, 24 and 25 for example).

Re claim 14, Chang et al. discloses a method, and for constructing a representation of a particular object having at least one property, the method further comprising: identifying at least one property group associated with the object which has been chosen to represent the object, at least one property of the object belonging to

each property group associated with the object; identifying any other object that the object references within a property of an identified property group; retrieving data corresponding to each of the properties belonging to the at least one property group; and representing the object using the retrieved data to generate a user interface (see figures 16, 19 and abstract for example).

Re claim 15, Chang et al. discloses a method, wherein the step of representing the object further comprises visually representing the object by displaying the retrieved data (see column 5 lines 35-38, column 7 lines 12-20 for example).

Re claim 16, Chang et al. discloses a method, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties (see figures 16 and 19 for example).

Re claim 17, Chang et al. discloses a method, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties (see figures 16 and 19 for example).

Re claim 18, Chang et al. discloses a method, wherein at least one object inheritance hierarchy exist between the object and the other identified objects (see column 16 lines 18-25 for example).

Re claim 19, Chang et al. discloses a method, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object (see figures 19 and 24 for example).

Re claim 20, Chang et al. discloses a method, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object (see figure 24 for example).

Re claim 21, Chang et al. discloses a method, wherein for at least one property group, the step of retrieving data corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group (see figures 19, 24 and 25 for example).

Re claim 22, Chang et al. discloses an object representation system for constructing a representation of an object having at least one property, the system comprising: an object database storing data for populating instances of the object; an object definition database storing object definition data which defines properties of the object, and storing at least one property group associated with the object; and a processor (compiles, see column 9 lines 33-35, and using computer, see column 9 lines 2-4 for example) configured to implement an object representation engine, the engine configured to generate a user interface representation of the object using at least one property group stored in the object definition database (see figures 16, 19 and abstract for example).

Re claim 23, Chang et al. discloses a system, wherein the engine is configured to generate the representation of the object by implementing the steps comprising: identifying at least one property group associated with the object which has been chosen to represent the object, at least one property of the object belonging to each property group associated with the object; identifying any other object that the object references within a property of an identified property group; retrieving data corresponding to each of the properties belonging to the at least one property group; and representing the object using the retrieved data to generate the user interface representation of the object (see figures 16 and 19 for example).

Re claim 24, Chang et al. discloses a system, wherein the step of representing the object further comprises visually representing the object by displaying the retrieved data (see column 5 lines 35-38, column 7 lines 17-20 for example).

Re claim 25, Chang et al. discloses a system, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties (see figures 16 and 19 for example).

Re claim 26, Chang et al. discloses a system, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties (see figures 16 and 19 for example).

Re claim 27, Chang et al. discloses a system, wherein at least one object inheritance hierarchy exist between the object and the other identified objects, and wherein each property group is unique to a particular object inheritance hierarchy (see column 16 lines 18-25 for example).

Re claim 28, Chang et al. discloses a system, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object (see figures 19 and 24 for example).

Re claim 29, Chang et al. discloses a system, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object (see figures 24 for example).

Re claim 30, Chang et al. discloses a system, wherein for at least one property group, the step of retrieving data corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group (see figures 19, 24 and 25 for example).

Re claim 31, Chang et al. discloses a system, wherein identifying the at least one property group associated with the object further comprises identifying a default property group associated with the object (see column 16 lines 2-6 for example).

Response to Arguments

3. Applicant's arguments filed 10/2/07 have been fully considered but they are not persuasive.

In response to applicant's arguments that the prior art does not teach “identifying at least one property group associated with the object which has been chosen to represent the object, at least one property of the object belonging to each property group associated with the object”, examiner disagrees. Figure 19 of prior art is described as an illustration of graphical user interfaces (GUI). Looking at the representation of the GUI of figure 19, one can clearly see the name of the "property group” which is “employee”; and an "object which has been chosen to represent the object" which is “  “for example; a "property of the object” which is “SalaryEmp” for example belonging to the “property group" which is “employee”. The representation of a table does not exclude it from being a representation of an object. A table is not excluded from being an object.

In response to applicant’s arguments regarding claim 11, again Chang teaches of "property group” (“employee” for example) which meets the claim limitations as argued above. Furthermore. Chang teaches of using computer with the invention, and that data is stored using the database which can also be used with the computer (see rejection above).

In response to applicant’s arguments regarding claim 22, again Chang teaches of "an object definition database storing object definition data which defines properties of the object, and storing at least one property group associated with the object” , examiner disagrees. The abstract of Chang teaches of GUI mapping and accessing objects in data stores, further in column 9 lines 1-5 describes accessing database to support the client data store manager and routing information to proper server data

store manager in support of the schema of the invention for example. Figure 16 also shows "object definition data which defines properties of the object" such as "firstName, lastName". Furthermore. Chang teaches of using computer, and compiling the invention (see rejection above).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J. Lee whose telephone number is 571-272-1977. The examiner can normally be reached on M-F at 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-2100 ext. 74. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jinhee J Lee/
Primary Examiner, Art Unit 2174

jjl